

IN THE CLAIMS:

Please amend Claims 1, 3, and 5, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

1. (currently amended) A composite image processing apparatus for performing a plurality of image processing functions, including a printer function and a scanner function, the apparatus comprising:

an IP address generator, connected to an IPv6 router on a network, operable to repeatedly acquire prefix information from the IPv6 router and generate [[an]] a plurality of IP addresses, based on the acquired prefix information, wherein each of the IP addresses is address unique to [[each]] a different one of the plurality of image processing functions, and wherein a number of the plurality of IP addresses is equal to a number of the plurality of image processing functions based on the repeatedly acquired prefix information; and

a controller operable to communicate with a plurality of appliances on the network using the IP addresses generated for the plurality of image processing functions and operate each of the plurality of image processing functions to execute communications between each of the plurality of image processing functions and at least one of the plurality of appliances, and to execute a transfer task for transferring packet data,

wherein the transfer task for transferring packet data is managed by an OS using buffer areas allocated to the printer function and the scanner function, respectively.

2. (previously presented) The composite image processing apparatus according to claim 1, wherein the controller executes the plurality of image processing functions by

executing, on a time-division basis using a task switchover, control task programs corresponding respectively to the plurality of image processing functions, and performs the communicating using the IP addresses generated for the plurality of image processing functions based on the control task program, taking as a unit a control task program corresponding to an image processing function of the plurality of image processing functions.

3. (currently amended) A control method performed by a composite image processing apparatus for performing a plurality of image processing functions, including a printer function and a scanner function, the method comprising:

an IP address generating step of establishing a connection to an IPv6 router on a network, repeatedly acquiring prefix information from the IPv6 router, and generating [[an]] a plurality of IP addresses, based on the acquired prefix information, wherein each of the IP addresses is address unique to [[each]] a different one of the plurality of image processing functions, and wherein a number of the plurality of IP addresses is equal to a number of the plurality of image processing functions based on the repeatedly acquired prefix information;

a controlling step of performing a communication with a plurality of appliances on the network using the IP addresses generated for the plurality of image processing functions and operating each of the plurality of image processing functions, so that the controlling step executes communications between each of the plurality of image processing functions and at least one of the plurality of appliances, and

an executing step of executing a transfer task for transferring packet data managed by an OS using buffer areas allocated to the printer function and the scanner function, respectively.

4. (previously presented) The control method of an image processing apparatus according to claim 3, wherein the controlling step involves executing the plurality of image processing functions by executing, on a time-division basis using a task switchover, control task programs corresponding respectively to the plurality of image processing functions, and performing the communication using the IP addresses generated for the plurality of image processing functions based on the control task program, taking as a unit a control task program corresponding to an image processing function of the plurality of image processing functions.

5. (currently amended) A computer-readable medium storing a computer-executable control program for implementing a method of controlling a composite image processing apparatus for performing the plurality of image processing functions, including a printer function and a scanner function, the method comprising:

an IP address generating step of establishing a connection to an IPv6 router on a network, repeatedly acquiring prefix information from the IPv6 router, and generating [[an]] a plurality of IP addresses, based on the acquired prefix information, wherein each of the IP addresses is address unique to [[each]] a different one of the plurality of image processing functions, and wherein a number of the plurality of IP addresses is equal to a number of the plurality of image processing functions based on the repeatedly acquired prefix information;

a controlling step of performing a communication with a plurality of appliances on the network using the IP addresses generated for the plurality of image processing functions and operating each of the plurality of image processing functions, so that the controlling step

executes communications between each of the plurality of image processing functions and at least one of the plurality of appliances, and

an executing step of executing a transfer task for transferring packet data managed by an OS using buffer areas allocated to the printer function and the scanner function, respectively.

6. (previously presented) The computer-readable medium according to claim 5, wherein the controlling step executes the plurality of image processing functions by executing, on a time-division basis using a task switchover, control task programs corresponding respectively to the plurality of image processing functions, and performing the communication using the IP addresses generated for the plurality of image processing functions based on the control task program, taking as a unit a control task program corresponding to an image processing function of the plurality of image processing functions.

7. (canceled)

8. (previously presented) The composite apparatus according to Claim 1, wherein the IP address generator sends each generated IP address to the router to check for duplication of the IP address, and, if the IP address is a duplicate, the IP address generator generates an IP address different from the duplicate IP address based on the prefix information.

9. (canceled)

10. (previously presented) The method according to Claim 3, wherein IP address generating step includes sending each the generated IP address to the router to check for duplication of the IP address, and, if the IP address is a duplicate, the IP address generating step includes generating an IP address different from the duplicate IP address based on the prefix information.